

AMENDMENTS TO THE CLAIMS

1-50. (CANCELED)

51. **(CURRENTLY AMENDED)** A fixator for retaining a graft on an artery comprising:

- a. a plurality of first parts for contacting the graft when the device is pierced radially through the graft and the artery wall,
- b. at least one second part for contacting the artery when the device is pierced radially through the graft and the artery wall, and
- c. a resilient member connecting the first and second parts,

wherein at least a portion of at least one of the first and second parts is sharpened to enable said part to pierce a graft and an artery, and wherein:

- (1) the resilient member biases the first and second parts towards each other into a retaining configuration such that in use the artery and the graft are retained together between the first and second parts of the device, and
- (2) the first and second parts are moveable into an open configuration in which they are:
 - (a) at least substantially disposed along a common axis with the resilient member, and
 - (b) further apart than in the retaining configuration to enable the device to be conveyed along an artery, **and**
- (3) **only the first and second parts extend from the resilient member, such that all structures extending from the resilient member move between the retaining and open configurations,**

and wherein the resilient member has a cross-sectional area at least substantially equal to the greater of:

- i. the cross-sectional area of the first parts when the first parts are in their open configuration, and
- ii. the cross-sectional area of the second parts when the second parts are in their open configuration.

52. **(CANCELED)**

53. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein in the retaining configuration at least one of the first and second parts forms an arcuate shape.

54. **(CANCELED)**

55. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein at least a portion of both the first and second parts is sharpened to enable said parts to pierce a graft and an artery.

56. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein the device is formed from one or more wires, the wires having lengths extending from the first parts to the second parts.

57. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein the device is formed from a shape memory alloy.

58. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein the device has a plurality of second parts.

59. **(PREVIOUSLY PRESENTED)** The fixator of claim 58 wherein said plurality of parts are integral or welded together.

60. **(PREVIOUSLY PRESENTED)** The fixator of claim 58 wherein the device has equal numbers of first and second parts.

61. **(PREVIOUSLY PRESENTED)** The fixator of claim 60 which is formed of a plurality of wires, each wire comprising a first part, a resilient member and a second part, wherein the plurality of wires are linked together by a weld, a sheath, a bush, a crimp or by wire.

62. **(PREVIOUSLY PRESENTED)** A kit comprising:

A. A fixator for retaining a graft on an artery, the fixator including:

- a. a plurality of first parts for contacting the graft when the device is pierced radially through the graft and the artery wall,
- b. at least one second part for contacting the artery when the device is pierced radially through the graft and the artery wall, and
- c. a resilient member connecting the first and second parts,
wherein at least a portion of at least one of the first and second parts is sharpened to enable said part to pierce a graft and an artery, and wherein:
 - (1) the resilient member biases the first and second parts towards each other into a retaining configuration such that in use the artery and the graft are retained together between the first and second parts of the device, and
 - (2) the first and second parts are moveable into an open configuration in which they are:
 - (a) at least substantially disposed along a common axis with the resilient member, and
 - (b) further apart than in the retaining configuration to enable the device to be conveyed along an artery,

B. at least one of:

- a. a device for supporting a catheter within an artery or arterial graft, the device including:
 - (1) a locating member for locating the device with respect to the catheter,
 - (2) a plurality of support members for supporting the catheter on the inner wall of the artery or graft,
 - (3) a resilient member connecting the locating member and the support members, wherein the resilient member biases the support members towards the artery wall,
 - (4) means for reducing the distance between the end of each support

member distal to the locating member and the end of said support member proximate the locating member, thereby causing the central section of said support member to bow radially outward with respect to the locating member;

b. a device for dilating an artery when delivered translumenally to a locus of an artery by means of a catheter, the device including:

- (1) a locating member for locating the device with respect to the catheter;
- (2) a plurality of dilating members,
- (3) a resilient member connecting the dilating members to the locating member and biasing the dilating member towards and into contact with the inner artery wall, whereby in use the resilient members cause the dilating members to apply outward pressure to the inner artery wall and dilate the artery,
- (4) means for reducing the distance between the end of each dilating member distal to the locating member and the end of said dilating member proximate the locating member, thereby causing the central section of said dilating member to bow radially outward with respect to the locating member in order to apply increased outward pressure on the inner wall of the artery when the device is in use.

63. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 in combination with a graft, wherein the fixator extends through the graft with its first parts contacting the surface of the graft, and with the resilient member extending through the graft.

64. **(CURRENTLY AMENDED)** A fixator for retaining a graft on an artery **comprising** **consisting of** elongated members, each elongated member extending between at least one first part and at least one second part wherein at least one of the first and second parts is sharpened, wherein each elongated member is capable of:

a. an open configuration wherein:

- (1) the first and second parts are distant and are at least substantially aligned along a common axis,
- (2) the first parts are adjacently situated with their lengths in abutment,
- (3) the second parts are adjacently situated with their lengths in abutment,
- (4) the first parts and second parts of the elongated members are all at least substantially coaxial when the elongated members are in their open configuration,
- (5) the fixator has an at least substantially uniform cross-sectional area as it extends from its first parts to its second parts; and

b. a retaining configuration wherein the first and second parts are closely spaced, and wherein each elongated member is biased towards the retaining configuration,

whereby the elongated members of the fixator may in the open configuration be inserted into the circumference of a graft-bearing artery to pierce the graft and artery, and may then be released to move to the retaining configuration, wherein the graft and artery are maintained between the first and second parts.

65. **(CANCELED)**

66. **(CANCELED)**

67. **(PREVIOUSLY PRESENTED)** The fixator of claim 64 wherein each elongated member extends entirely between its first and second parts, whereby its first and second parts define its terminal ends.

68. **(CURRENTLY AMENDED)** A fixator for retaining a graft on an artery, the fixator comprising elongated members:

- a. extending between first and second parts, at least one of the first and second parts being sharpened, and
- b. being connected between their first and second parts,

wherein each elongated member moves between:

- (1) an open configuration wherein the elongated member and its first and second parts are at least substantially oriented along a linear axis with its first and second parts distantly spaced, and
- (2) a retaining configuration wherein the elongated member is bent so that its first and second parts are closely spaced,

and wherein:

- i. only the first and second parts extend from the connection between the elongated members, and
- ii. the elongated members, when in their open configurations, have their first parts adjacently situated in abutment and their second parts adjacently situated in abutment;

whereby the elongated members of the fixator may in the open configuration be inserted into the circumference of a graft-bearing artery to pierce the graft and artery, and may then be moved to the retaining configuration to situate the graft and artery between the first and second parts.

69. **(CANCELED)**

70. **(PREVIOUSLY PRESENTED)** The fixator of claim 68 wherein each elongated member is normally biased into the retaining configuration.

71. **(PREVIOUSLY PRESENTED)** The fixator of claim 68 wherein the first parts and second parts of the elongated members are all at least substantially coaxial when the elongated members are in their open configuration.
72. **(PREVIOUSLY PRESENTED)** The fixator of claim 68 wherein the fixator has an at least substantially uniform cross-sectional area between the non-sharpened portion of the first parts and the non-sharpened portion of the second parts when the elongated members are in their open configuration.
73. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein the first parts, second parts, and resilient member are all at least substantially coaxial when the first and second parts are in their open configuration.
74. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein the first parts are adjacently aligned in abutment with each other when the first and second parts are in their open configuration.
75. **(PREVIOUSLY PRESENTED)** The fixator of claim 51 wherein:
 - a. the first parts are adjacently aligned in abutment with each other, and
 - a. the second parts are adjacently aligned in abutment with each other,when the first and second parts are in their open configuration.

76. (NEW) The fixator of claim 51 in combination with:

- a. an artery having exterior artery surface and an opposing interior artery surface bounding an artery interior, and
- b. a graft having an exterior graft surface and an interior graft surface bounding a graft interior, wherein the graft is situated within the artery interior with the exterior graft surface adjacent the interior artery surface,
wherein the fixator extends through the graft and artery with:
 - (1) the first parts at least partially extending within the graft interior adjacent the interior graft surface, and
 - (2) the second parts at least partially extending outside the artery adjacent the exterior artery surface.

77. (NEW) The fixator of claim 64 in combination with:

- a. an artery having exterior artery surface and an opposing interior artery surface bounding an artery interior, and
- b. a graft having an exterior graft surface and an interior graft surface bounding a graft interior, wherein the graft is situated within the artery interior with the exterior graft surface adjacent the interior artery surface,
wherein the fixator extends through the graft and artery with:
 - (1) the first parts at least partially extending within the graft interior adjacent the interior graft surface, and
 - (2) the second parts at least partially extending outside the artery adjacent the exterior artery surface.

78. **(NEW)** The fixator of claim 68 in combination with:

- a. an artery having exterior artery surface and an opposing interior artery surface bounding an artery interior, and
- b. a graft having an exterior graft surface and an interior graft surface bounding a graft interior, wherein the graft is situated within the artery interior with the exterior graft surface adjacent the interior artery surface,
wherein the fixator extends through the graft and artery with:
 - (1) the first parts at least partially extending within the graft interior adjacent the interior graft surface, and
 - (2) the second parts at least partially extending outside the artery adjacent the exterior artery surface.

79. **(NEW)** The fixator of claim 51 wherein the fixator, when in the retaining configuration, is shorter along a direction aligned along the common axis than when in the open configuration.

80. **(NEW)** The fixator of claim 64 wherein the fixator, when in the retaining configuration, is shorter along a direction aligned along the common axis than when in the open configuration.

81. **(NEW)** The fixator of claim 68 wherein the fixator, when in the retaining configuration, is shorter along a direction aligned along the linear axis than when in the open configuration.